Red River Authority of Texas Clean Rivers Program

AQUATIC LIFE MONITORING



APRIL 23, 2019

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CRP ENVIRONMENTAL TECHNICIAN

2012 Texas Water Quality Inventory Water Bodies Evaluated			
SegID: 0214	Wichita River Below Diversion Lake Dam From the confluence with the Red River in Clay County to Diversion Dam in Archer County		
Segment Type Freshwater Stream			
AU_ID: 0214_01	From the confluence with the Red River upstream to the confluence with an un-named tributary immediately upstream of FM 2393		
Flow Type perennial	Flow Type Source TSWQS	ALU Designation High	ALU Designation Source TWQS-Appendix A
Station ID(s): 1	0145		
AU_ID: 0214_02	From an un-named tributary i WWTP	mmediately upstream of	FM 2393 upstream to the River Road
Flow Type	Flow Type Source	ALU Designation	ALU Designation Source
perennial	TSWQS	High	TWQS-Appendix A
Station ID(s): 1	0148; 10149		
AU_ID: 0214_03	From the River Road WWTP upstream to the confluence with Buffalo Creek		
Flow Type perennial	Flow Type Source TSWQS	ALU Designation High	ALU Designation Source TWQS-Appendix A
Station ID(s): 1	0150; 10151; 10152; 10153; 15999; 16	734; 16735; 18832; 20321	
AU_ID: 0214_04	From the confluence with Buff	falo Creek upstream to th	ne confluence with Beaver Creek
<u>Flow Type</u> perennial	Flow Type Source TSWQS	ALU Designation High	ALU Designation Source TWQS-Appendix A
Station ID(s): 1	0154		
AU_ID : 0214_05 From the confluence with Beaver Creek upstream to the Diversion Lake Dam			
Flow Type	Flow Type Source	ALU Designation	ALU Designation Source
perennial	TSWQS	High	TWQS-Appendix A
Station ID(s): 1	0155; 10156		

Biological Monitoring

- Aquatic Life Monitoring on Beaver Creek (15120) and Wichita River (10145)
- Biological Assessments
 - Aquatic Life Use Attainability Analyses
 - Receiving Water Assessments
 - Aquatic Life Monitoring
 - Aquatic Life Assessments

Biological Monitoring

Index Period

- Help determine ALUs or to evaluate support of existing ALUs
- Includes Critical Period and Non-critical Period
- March 15 October 15

Critical Period

- > July 1- Sept 30
- Non-Critical Period
 - ▶ March 15 June 30, and Oct 1 Oct 15

Biological Monitoring

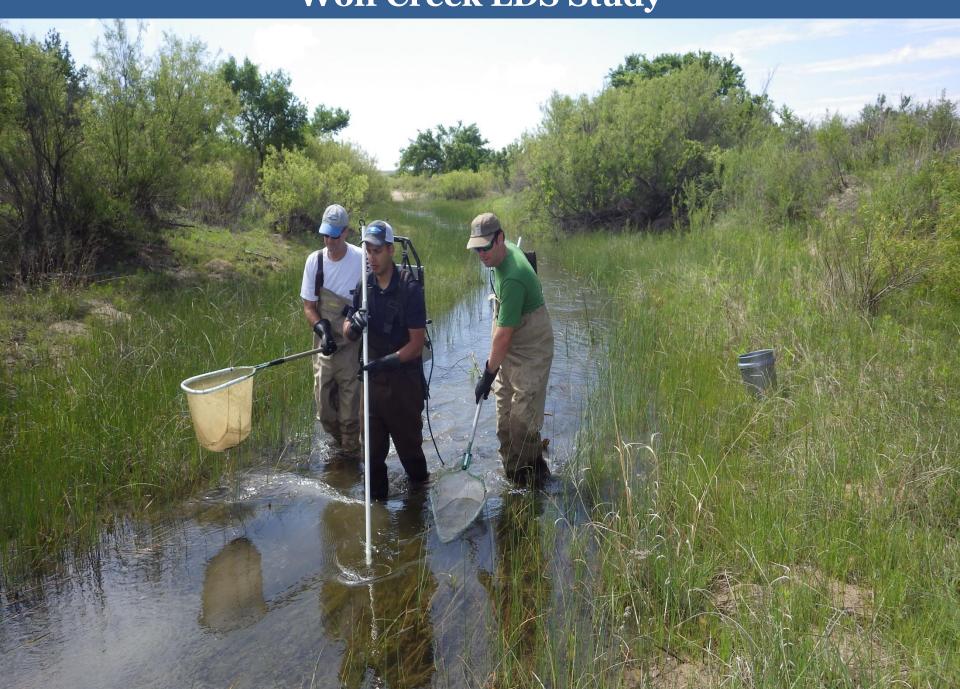
Aquatic – Life Monitoring

- Characterization of the fish assemblage
- Characterization of the benthic macroinvertebrate community
- Assessment of the stream's physical habitat
- > Instantaneous field measurements
- Measurement of flow discharge
- 24 –Hour Dissolved Oxygen monitoring
- Conventional water chemistry sample

Wolf Creek LDS Study



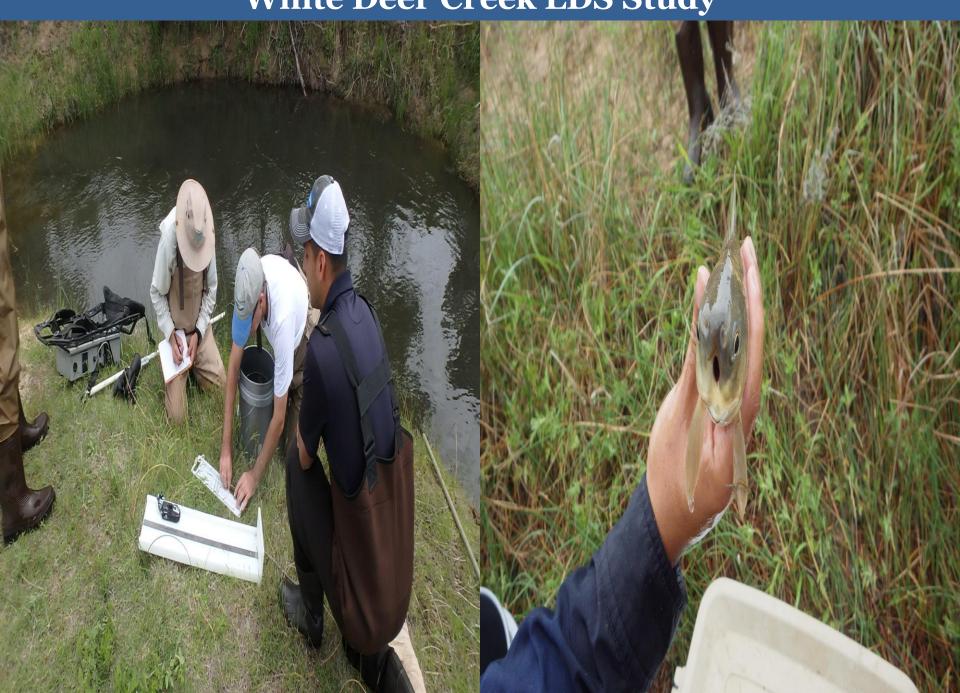
Wolf Creek LDS Study



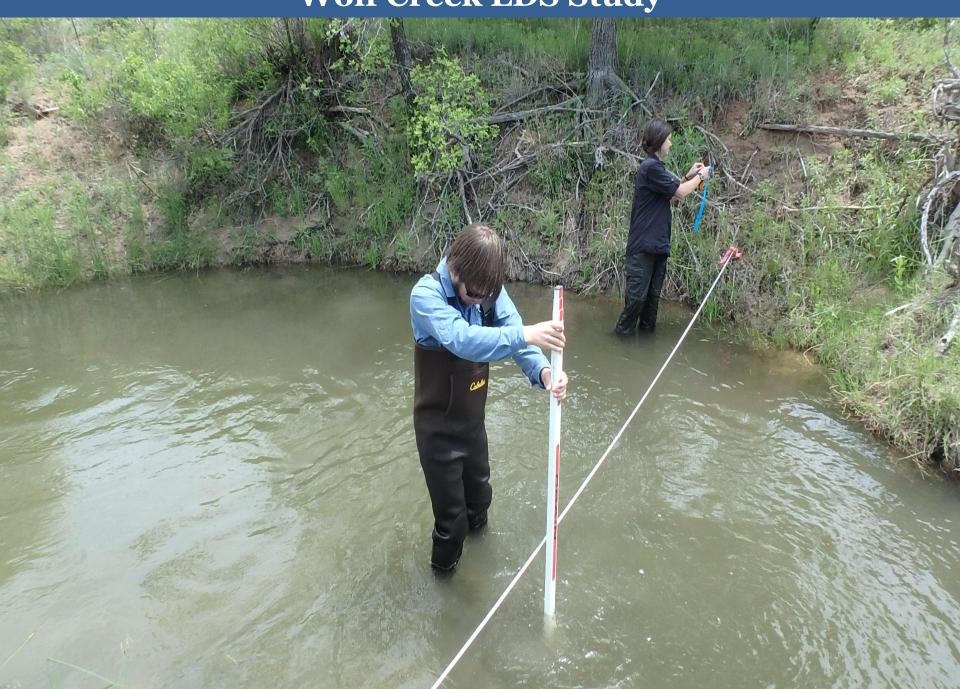
White Deer Creek LDS Study



White Deer Creek LDS Study



Wolf Creek LDS Study



White Deer Creek LDS Study



McClellan Creek – Largemouth Bass



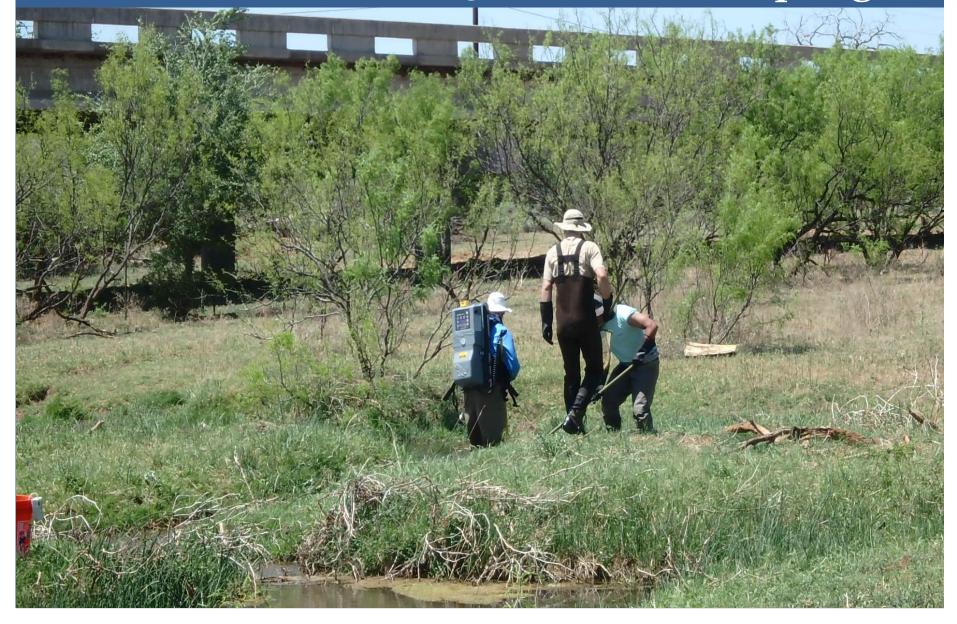
McClellan Creek – Physical Habitat



Sweetwater Creek – 24 hour DO



Buck Creek at US 83 – Nekton Sampling



Salt Fork Red River at US 83 - Benthics



N Wichita River – Nekton Sampling



Questions

